

PELTONEN et al
Serial No. **09/757,479**
May 13, 2003

REMARKS

Favorable reconsideration and allowance of this application are requested.

By way of the amendment instructions above, independent claims 24 and 37 have been further amended so as to clarify the claimed subject matter and to further define this invention patentably over the applied references of record. Specifically, each claim now clarifies that the center of the rotor is such to permit the flow therethrough of the solids-liquid suspension, as supported by the drawing Figures and page 4 of the originally filed specification.

The Examiner has now rejected the claims based principally on the McBride (USP 1,841,414) and Van Riper et al (USP 300,170) patents. Specifically, prior claims 24 and 37 have been rejected as allegedly anticipated by McBride under 35 USC §102(b), while prior claims 24-25, 27-28, 36-37 and 40-42 attracted a rejection under that same statutory provision based on Van Riper et al. Schafhaus (USP 431,624) has been combined with Van Riper et al to reject prior claims 26, 29-32, 43, 47-50 and 52-53 under 35 USC §103(a). Applicant respectfully suggests that the rejections of record are inappropriate against the presently pending claims.

Turning attention to McBride, applicants note that it does indeed disclose a freely rotatable rotor arranged in connection with a flow pipe. It is really at this point that any perceived similarity to the present invention ceases. Specifically, the rotor of McBride is formed of a shaft, two round end plates, and a fine mesh iron screen (page 2, line 10) arranged cylindrically between the end plates. Outside the iron screen there are blades which make the rotor rotate. The rotor is arranged in a chamber of its own so that only a small part of the chamber is open to the flow pipe. In fact, the rotor is open to the flow pipe only such that the radially extending blade fits into the flow

PELTONEN et al
Serial No. **09/757,479**
May 13, 2003

channel, and the fluid flowing in the channel makes the rotor rotate.

Upon closer scrutiny of the operation of the McBride mixer, it can be seen that there are vast differences between it and the present invention.

Firstly, McBride is concerned with liquid fuels, and their dyeing i.e. coloring. Official Notice may be taken of the fact that liquid fuels, like gasolines, flow easily, and cannot be considered as a solids-liquid suspension of the type to which the present invention is concerned.

Secondly, on page 2, line 11 onwards, McBride teaches that the " screen permits of the passage to a limited extent of the liquid fuel into the dye cage" (interior of the iron screen). If the passage of liquid fuels into the cage is limited by means of a fine mesh iron screen, then there clearly would be no "open space" to permit solids-liquid suspensions to flow therethrough as claimed by the present applicants.

Thirdly, on page 2, line 55 onwards, it has been taught by McBride that the interior of the iron screen mesh is actually a dye container where the chemical to be mixed is poured.

Fourthly, page 2, line 77 onwards, McBride explains how the rotor is made to rotate, and, especially, how the dye is made to color the fuel. As part of the fuel enters the cage or container, the dye is dissolved into the fuel coloring the fuel.

Fifthly, the rotor blades of McBride do not mix the dye with the fuel, as the fuel, in a way, has to go into the dye container through the fine mesh iron screen, and dissolve the dye whereby, when the fuel with the dye exits the interior of the iron screen the fuel and dye have already been mixed together.

PELTONEN et al
Serial No. **09/757,479**
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Thus, it is clear that neither the apparatus of McBride nor its operation is similar to the applicants' claimed invention. Specifically, the present applicants' claims already recite that the structures are concerned with a solids-liquid suspension, whereby it is clear that the McBride rotor does not allow such to flow therethrough as even the passage of fuel through the fine mesh iron screen is limited. In order to emphasize such a distinction, claims 24 and 37 have been amended to recite that the blades which leave the rotor center open thereby allow for flow of the solids-liquid suspension therethrough, although somewhat different language and hence claim scope has been employed.

The Examiner has also cited Van Riper et al, which discusses a soda fountain. The Examiner argues that Van Riper et al disclose a freely rotating rotor. Applicants respectfully disagree. Particularly, applicants suggest that a freely rotating rotor at least in the sense of the present applicants' invention is not disclosed therein.

Van Riper has supported the mixing beaters S on arms R so that when the stream of soda water is introduced into the hollow arms R, the arms start rotating due to the ends of the arms R having been turned into circumferential direction (Fig. 5 teaches this). Whether this is free rotation or not, applicants do not really know, but at least in view of the applicants' invention, the phenomenon is different. Specifically, applicants' invention effects the rotation of the rotor by subjecting directly the mixer blades to the flow of the solids liquid suspension, and not by making the blades rotate some other way.

As noted above, claim 24 is directed to the mixing of a solids-liquid suspension, which is not in question in either McBride or in Van Riper.

Furthermore, McBride does not teach the existence of the conduit for fluid i.e. for dye, as the dye is added by means of removing the dye container, filling such, and

PELTONEN et al
Serial No. **09/757,479**
May 13, 2003

inserting it back. Van Riper, on his part, introduces the fluid along the arms of the blades, whereby the casing does not include the conduit (which, however, has not been claimed in claim 24), but the rotor. Thus, the amendment to claim 24 which clarifies that "a conduit provided in one of said inlet piping and said mixer casing for feeding" even further distinguishes the present invention from Van Riper.

Finally, the language of claims 24 and 37 which functionally require blades to leave the rotor center open for the solids-liquid suspension and the fluid to enter and flow therethrough is suggested to be totally absent from McBride and/or Van Riper.

The same reasoning as noted above with regard to claim 24 can likewise be made with respect to claim 37. Moreover, the interior space has been defined in such a manner in claim 37 that McBride is not relevant (introduction of a mass flow including the solids-liquid suspension) unless the interior space is understood to cover the entire interior of the casing 5 in McBride – which it does not. However, McBride does not say a word about the cavity between the iron screen and the mixer casing. Furthermore, the rotor blades, and especially their positioning as recited in claim 37 is not suggested or disclosed at all in Van Riper.

Accordingly the rejections of record based on McBride and Van Riper under 35 USC §102(b) are suggested to be inapplicable to the amended version of the claims presented herewith.

Combining the applied Schafhaus reference with Van Riper also does not cure the deficiencies of the latter. Thus, as noted during previous prosecution, while Shafhaus does disclose a "valve" or sorts, that is really all that it discloses. It does not teach modifying the Van Riper reference in order to arrive at the present invention as discussed above. Therefore withdrawal of the rejections advanced under 35 USC §103(a) is also in order.

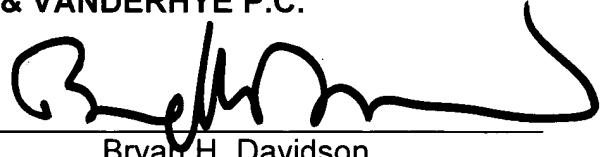
PELTONEN et al
Serial No. **09/757,479**
May 13, 2003

Applicants submit that this application is now in condition for allowance.
Accordingly, prompt official notice to that effect is solicited.

Respectfully submitted,

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